ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

Federal Agency Name(s): National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce

Funding Opportunity Title: FY2014 Demonstration of a U.S. Marine Biodiversity Observation Network (Marine BON)

Announcement Type: Initial

Funding Opportunity Number: NOAA-NOS-IOOS-2014-2003803

Catalog of Federal Domestic Assistance (CFDA) Number: 11.012, Integrated Ocean Observing System (IOOS)

Dates: Full proposals must be received by 5:00 p.m. Eastern on Monday, December 2, 2013.

Funding Opportunity Description: This funding opportunity invites proposals for projects that demonstrate how an operational Marine Biodiversity Observation Network (Marine BON) could be developed for the nation by establishing one or more prototype networks in U.S. coastal waters, the Great Lakes, and the EEZ.

Biological diversity, or biodiversity, is defined as the variety of life, encompassing variation at all levels of complexity – genetic, species, ecosystems, and biomes – and including functional diversity and diversity across ecosystems. A growing body of research demonstrates that 1) the maintenance of marine biodiversity (including coastal biodiversity) is critical to sustained ecosystem and human health and resilience in a globally changing environment, and 2) the condition of marine biodiversity offers a proxy for the status of ocean and coastal ecosystem health and ability to provide ecosystem services. Thus, managing our marine resources in a way that conserves existing marine biodiversity would help address other ocean management objectives (Palumbi et al. 2009). For example, it would provide information to enhance biosecurity against threats such as invasive species and infectious agents, enable predictive modeling, better inform decision making, and allow for adaptive monitoring and Ecosystem-Based Management.

As stated in the final recommendations of the Interagency Ocean Policy Task Force, it is the policy of the United States to protect, maintain, and restore the health and biological diversity of ocean, coastal, and Great Lakes ecosystems and resources (http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf). The Census of Marine

Life, which concluded in 2010, greatly enhanced our understanding of the status of marine biodiversity. It also made clear the importance of clear-cut, systematic and sustainable approaches to observing and monitoring biodiversity across different levels and at a national scale.

In May 2010, the Biodiversity Ad Hoc Group under the Interagency Working Group on Ocean Partnerships convened a workshop of experts to develop a plan and recommendations for attaining an operational marine biodiversity observation network (Marine BON) for the nation. The full workshop report can be found online: http://www.nopp.org/wp-content/uploads/2010/03/BON_SynthesisReport.pdf. In May 2013, workshop steering committee members published a paper in BioScience on the feasibility of establishing a Marine BON (http://www.jstor.org/stable/pdfplus/10.1525/bio.2013.63.5.8.pdf).

On behalf of the National Oceanographic Partnership Program (NOPP), NOAA and several of its partner agencies, including the National Aeronautics and Space Administration (NASA), the Bureau of Ocean Energy Management (BOEM), and the United States Geological Survey (USGS), are requesting proposals to address the recommendation from the 2010 workshop to initiate an integrated Marine BON demonstration project. The agencies are requesting proposals for one or more broadly coordinated demonstration projects in U.S. coastal waters, the Great Lakes, and the exclusive economic zone (EEZ) that demonstrate how an end-to-end marine BON can be developed. "End-to-end" refers to integration of observations and data across multiple scales of diversity (genetic to ecosystem, microbes to whales), time (instants to centuries), and space (in situ to satellite remote sensing). Special consideration will be given to proposals that demonstrate potential for establishing long-term, sustainable monitoring through partnerships.

NOPP anticipates making one or more awards, subject to the availability of funds, in amounts ranging from \$500,000 to \$2,000,000 per year for up to five years.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

The NOPP was established by the U.S. Congress (Public Law 105-85) in FY1998 to: (1) promote the national goals of assuring national security, advancing economic development, protecting quality of life, and strengthening science education and communication through improved knowledge of the ocean; and (2) coordinate and strengthen oceanographic efforts in support of those goals by identifying and carrying out partnerships among Federal agencies, academia, industry, and other members of the oceanographic scientific community in the areas of data, resources, education, and communication, and reporting annually to Congress on the program.

In May 2010, the NOPP Program Office and seven Federal agency co-sponsors convened a workshop titled "Attaining an Operational Marine Biodiversity Network (Marine BON)." As a follow up to that workshop, this funding opportunity, published on behalf of the NOPP and participating Federal agencies, is designed to implement a recommendation from the workshop calling for Marine BON demonstration projects.

During the workshop, participants developed case studies for implementation of a Marine BON in four regions or ecosystems: 1) the deep sea (pelagic realm and benthic seabed); 2) continental shelves; 3) estuaries and nearshore regions, including the Great Lakes; and 4) coral reefs. The case studies were intended to outline models for observing biodiversity in each region or ecosystem, including specific suggestions for siting, building on existing facilities and programs, leveraging data sets and observing systems, integrating across existing systems, and incorporating transformative ideas and technologies to better address biodiversity data and information needs. Participants recommended that the federal agencies pursue demonstration projects, through the NOPP, for development of an operational Marine BON in one or more of these regions or ecosystems. Participants concluded that integration of results is lacking among the considerable number of existing ongoing biodiversity monitoring efforts.

The full list of recommendations and descriptions of the case studies are in the workshop report: http://www.nopp.org/wp-content/uploads/2010/03/BON_SynthesisReport.pdf.

Following are themes identified by workshop participants as vital to the success of an operational Marine BON, which applicants should consider when preparing their proposals:

- An operational Marine BON should integrate existing monitoring and management programs with new approaches.
- Assembly and synthesis of existing programs and data are necessary to identify trends and gaps in taxonomic, spatial, and temporal coverage. These include novel ideas for dealing with data collected from multiple techniques and different elements of biodiversity that do not typically allow for temporal or spatial comparisons, as well as new tools that allow for improved searches of and access to different types of data products. Overall, linking biodiversity surveys that capture data at all scales from microbes to whales, from instants to centuries, and from water samples to satellite imagery is essential.
- Comprehensive understanding will require use of conventional and innovative methods. Planned and recently-launched observing sites, systems, and programs should be expanded to include additional types of observations and data (including the application of appropriate data standards). In particular, routine automation of new acoustic and imaging techniques could be considered as a means to extend the spatial and temporal ranges and the resolution of existing observing systems.
- Knowledge gaps exist in understanding the spatial and temporal patterns of biodiversity at all levels of organization. This includes microorganisms (e.g., archaea, bacteria, protists, and viruses), intermediate groups (e.g., invertebrates) and large, mobile species (e.g., turtles, birds, and marine mammals). An operational Marine BON should identify and address at least a subset of these gaps.
- Both unstudied areas and those that have been subject to research and monitoring should be considered as part of developing an operational Marine BON. Primary considerations in selecting sites include:
 - a. richness and representativeness of taxa, functional groups and habitats
 - b. likelihood of threat by pollution (including noise),

- c. sensitivity to climate forcing, and
- d. logistical feasibility.
- Development of taxonomic expertise and resources at appropriate scales of space, time, and taxonomic resolution is critical. A major impediment to studying and monitoring biodiversity is that existing taxonomic resources, while extensive, are scattered. Such resources include guides, museum collections, databases of molecular sequences and geospatial distributions, measures of abundance, sampling and data management protocols, and satellite-derived environmental imagery. Information collected through an operational Marine BON should contribute to an accurate and up-to-date checklist of U.S. marine biota, along with identification tools. This may include linkages to resources such as the Encyclopedia of Life, Barcode of Life, Integrated Taxonomic Information System (ITIS), and World Register of Marine Species (WoRMS).

Funding Opportunity:

On behalf of the National Oceanographic Partnership Program (NOPP), NOAA and several of its partner agencies, including the National Aeronautics and Space Administration (NASA), the Bureau of Ocean Energy Management (BOEM), and the United States Geological Survey (USGS), are requesting proposals for one or more Marine BON demonstration project(s) in U.S. coastal waters, the Great Lakes, and the EEZ. Proposals should demonstrate how an operational Marine BON could be developed for the nation by establishing a prototype network of observation sites and observation systems for one or more of the regions or ecosystems identified by the workshop participants: 1) the deep sea (pelagic realm and benthic seabed); 2) continental shelves; 3) estuaries and nearshore regions, including the Great Lakes; and 4) coral reefs.

Projects may represent a large geographic scale (e.g., the Arctic, Gulf of Mexico, Chesapeake Bay, Atlantic Coast, Great Lakes, or California Current system) or a subset of a larger geographic area (e.g., the Flower Garden Banks, Atlantic Canyons, Deep Gulf, Hannah Shoal, or Pacific coast rocky intertidal). However, proposals that only propose work in a single, specific site will not be responsive, as this solicitation seeks to fund projects that integrate efforts across sites and networks.

Priority for funding will be given to proposals that that demonstrate long-term sustainability through partnerships with or among federal agency partners or programs. This could include, but is not limited to, projects that:

- Integrate biodiversity and environmental observations and address associated data collection and management needs at a national scale, including projects that further development of the national Animal Telemetry Network (U.S. ATN), which is designed to meet national needs for cost-effective, near-real time observations of aquatic animals and their habitats (see: http://www.ioos.noaa.gov/observing/animal_telemetry/ and https://docs.google.com/a/noaa.gov/file/d/0BwW7dLnWT2C0LTRPdjYzeUxPT0U/edit);
- Integrate biodiversity observations from microbial and benthic communities to observations from higher trophic levels to inform system-level understanding of the impact of specific stressors such as ocean acidification, climate change or the introduction of invasive species on the biodiversity of an area;
- Integrate satellite remote sensing, from NASA, NOAA, and USGS sensors, and in situ observations to address relationships and connections between in situ phenomena, observations and collections, and phenomena occurring at larger spatial (e.g., ecosystem or ecoregional) scales better assessed with satellite remote sensing technologies;
- Build on existing, long-term monitoring programs, such as those currently implemented or planned by BOEM's Environmental Studies Program (e.g., Marine ARctic Ecosystem Study or MARES), NOAA, and the U.S. Fish and Wildlife Service, to provide baseline characterization and inform understanding of shifts in baseline biological and environmental conditions, the status and trends of populations, and condition of habitats/ecosystems;
- Associate existing federal agency monitoring programs with new sources of biological, oceanographic or satellite data to increase spatial and temporal resolution;
- Employ innovative techniques for data discovery and methods that dynamically interrelate data sets and add value to existing monitoring data;

- Coordinate with or utilize Smithsonian Institution resources (e.g., National Museum of Natural History, Tennenbaum Marine Observatories, Smithsonian labs and marine stations) for lab space and lab time, data and observations, and taxonomic or other expertise;
- Collaborate with the U.S. Integrated Ocean Observing System (U.S. IOOS) participants including the U.S. IOOS Regional Associations for coastal, ocean and Great Lakes observations, infrastructure, data management and modeling capabilities; and
- Engage NOAA's National Oceanographic Data Center, U.S. IOOS, and/or USGS's Ocean Biogeographic Information System (OBIS-USA) for biological data and metadata management, archiving, discovery, and access.

Data Management Plan Requirement:

Data accessibility and strong data management are the foundation for success for any observing system, including an operational Marine BON. Applicants are expected to provide the widest practical access to data collected and should include a data management plan in the proposal. The costs for data management, archiving, and access should be included in the budget of a submitted proposal and reflected in the total project cost.

A Marine BON, as a U.S. contribution to the Group on Earth Observations (GEO) Biodiversity Observation Network, would ascribe to the Global Earth Observing System of Systems (GEOSS) data sharing principles that have been endorsed by all GEO members and which postulate full and open exchange of data and metadata with minimum possible cost, delay and restriction.

Marine BON data management and cyber-infrastructure activities should use approved Federal standards and protocols where applicable. These include:

• Federal Geographic Data Committee (FGDC) or International Standards Organization (ISO 19115) standards for metadata (http://www.fgdc.gov/metadata/geospatial-metadata-standards);

- U.S. implementation of Darwin Core for capturing biogeographic data content (http://snapper.colorado.edu/ObisUsa/portal/XsdReader.php/mbg)
- U.S. IOOS Data Management and Communication (DMAC) standards and protocols (https://geo-ide.noaa.gov/wiki/index.php?title=IOOS_DMAC_Subsystem_Implementation_Guidance); and
- U.S. IOOS Biological Data Project standards and protocols (http://www.ioos.noaa.gov/biological_observations/welcome.html).

Applicants are encouraged to engage NOAA's National Ocean Data Center for archiving and USGS's Ocean Biogeographic Information System-USA (OBIS-USA) for enrollment and to facilitate management of biodiversity data. This includes development of high quality metadata for all data collected or integrated as part of this project. Metadata should adhere to the ISO 19115 family of geospatial metadata standards that have been endorsed by the Federal Geographic Data Committee. Applicants should also register their data services through the U.S. IOOS registry (http://www.ioos.noaa.gov/catalog/register.html).

Applicants are welcome to propose innovations in data collection and/or management (including archive, discovery, and access) as long as these innovations are built upon a standards-based foundation as described above. Innovations may include innovative crowd-sourcing of data discovery and methods for enhanced searches of Web-based data. Applicants are encouraged to address how historical or legacy data will be integrated into the demonstration project.

NOAA Data Sharing Policy:

Environmental (including biological) data and information collected or created under NOAA grants or cooperative agreements should adhere to the NOAA Data Sharing Procedural Directive (https://www.nosc.noaa.gov/EDMC/documents/EDMC-PD-DSP.pdf). NOTE: When data are not collected or created with funds from NOAA, the data may be made available in accordance with any agreement made with the data provider.

NOPP Partnership Requirement:

For all NOPP-funded activities, team efforts are required among at least two of the following three sectors: academia, government (including federal, state, local, and tribal), and the private sector (including Non-Governmental Organizations). In other words, the submitted proposals must be from groups of investigators comprising people from at least two of the three sectors (academia, government, and private sector) mentioned above.

B. Program Priorities

Priorities for this program are to:

- 1. Demonstrate how a U.S. Marine BON might operate through establishment of a prototype network in U.S. coastal waters, the Great Lakes, and the EEZ.
- 2. Integrate existing technologies, methodologies, monitoring and management activities with new approaches.
 - 3. Demonstrate potential for long-term sustainable monitoring through partnerships.

C. Program Authority

33 U.S.C 3601-3610

Statutory authority for this program is provided under the Integrated Coastal and Ocean Observation System Act of 2009.

II. Award Information

A. Funding Availability

Total anticipated funding for all awards is subject to the availability of appropriations. NOPP, through its partner agencies, including NOAA, NASA, BOEM, and USGS, expects to fund approximately one to five awards under this announcement in amounts ranging from \$500,000 to \$2,000,000 per year for up to five years. Funding is contingent on availability of funds each year and satisfactory performance of the recipient. Proposals received under this announcement but not funded in the current fiscal period may be considered for funding in another fiscal period without NOAA repeating the competition.

B. Project/Award Period

This is a multi-year funding opportunity. Unless otherwise specified, applicants may request funding for up five years. Funding is contingent upon availability of funds from Congress and satisfactory performance of the recipient, and is at the sole discretion of the partner agencies.

C. Type of Funding Instrument

NOAA will likely issue a cooperative agreement and will not award contracts from this competition. Partner agencies reserve the right to award grants or contracts and other transactions as they deem appropriate.

If a cooperative agreement is awarded, the federal government will be substantially involved by, for example, coordinating partners and teams to accomplish the work; assisting with technical aspects of the project(s); and/or coordinating access to Federal data or facilities needed to support the work.

III. Eligibility Information

A. Eligible Applicants

As noted above, for all NOPP-funded activities, team efforts are required among at least two of the following three sectors: academia, industry (including Non-Governmental Organizations, or NGOs), and government (including federal, state and local).

Eligible applicants are institutions of higher education, other non-profits, state, local, Indian Tribal Governments, commercial organizations, US Territories and Federal agencies that possess the statutory authority to accept funding for this type of activity. If requesting funds under this award, federal agencies must identify the relevant statutory authorities that will allow for the receipt of funds. Because this announcement is not proposing to procure goods or services from applicants, the Economy Act (31 USC 1535) is not an appropriate legal basis.

If applicants have partners who would receive funds, the lead grantee will be expected to provide funds using subcontracts or other appropriate mechanisms to the project partners. If a federal partner is a NOAA office, the funds will be transferred internally. If the partners are federal agencies other than NOAA, the grantee and the federal partner must take steps

relevant to their organizations to ensure that funds can be transferred by the primary grantee and received by any federal partners.

Applications by scientists at existing NOAA Cooperative Institutes (CI):

Scientists at existing NOAA CIs may apply for this opportunity under their CI if the opportunity fits within the current Research Themes of the CI. At the time of submission, each competitive proposal application package submitted by a CI PI that has been approved by the University must include a cover letter describing the intent to incorporate the terms of the CI Memorandum of Agreement (MOA). The cover letter will specify the name of the CI, the current CI cooperative agreement number, and the NOAA-approved research theme and task that applies to the proposal. NOAA Program Managers overseeing this work reserve the right to award a proposal forwarded from a CI, but to not manage that proposal through the CI.

B. Cost Sharing or Matching Requirement

There is no requirement for cost sharing.

NOPP appreciates that applicants may seek additional support (in-kind or cash) for development of Marine BON demonstration projects. While a cost share of funding is not required and will not be evaluated as part of the funding decision, applicants are requested to provide a description of complementary funding and in-kind contributions from project partners.

C. Other Criteria that Affect Eligibility

None.

IV. Application and Submission Information

A. Address to Request Application Package

Application packages for full proposals are available through Grants.gov. If an applicant does not have Internet access, application packages can be requested from:

Regina Evans

U.S. IOOS

1100 Wayne Avenue, Suite 1225

Silver Spring, Maryland 20910

E-mail: regina.evans@noaa.gov

B. Content and Form of Application

Applications that do not include all required documentation and information as listed below will not be reviewed.

Letter of Intent: Letters of Intent are not requested under this announcement.

Full proposal: The proposal narrative must total no more than 20 pages (single-spaced, 12-point font). The 20-page limit does not include the proposal title page, a table of contents, the data management plan, and the project summary referenced below under item two (2), and any appendices. Appendices should be limited to materials that directly support the main body of the proposal (e.g., detailed budget information, negotiated indirect cost rate agreement, support letters, resumes, references, lists of data sources, and maps) and may not exceed 25 pages in length. In addition to an overall budget, a form SF-424A (http://www.grants.gov/agencies/forms_instruction_information.jsp) must be submitted for each year of the proposal. Applicants must also provide a separate budget for each subcontract. SF-424As will not be included in the page count of the proposal or appendices.

Applicants should paginate their proposal and any appendices. Appendices may be paginated as standalone documents (individually) or collectively. Applicants should present their workplan in priority order such that if less money is available than is requested, the process of modifying proposals is simplified.

All funding application packages must contain the following components:

1. Title Page (Proposal Cover Sheet). Include proposal title, topic area(s) applied for, complete contact information for the Principal Investigator and Financial Representative,

duration of proposed project, and funding request. If funds are to be transferred to a NOAA or other federal agency partner on the project, state the amount to NOAA on the cover.

- 2. Project Summary. Provide a no more than one-page summary of the proposed project. The summary should be prepared for a broad audience and contain the following sections:
 - a. Project Name/Title
 - b. Primary Contact (name, address, phone, fax, e-mail)
 - c. Recipient Institution
 - d. Other Investigators (name, affiliated institution or agency)
 - e. Brief Project Summary including objectives and intended benefits
 - f. Partners
- 3. Project Description. All project descriptions (proposals) must include the following sections:
- a. Goal and Objective(s). Describe in the narrative the specific project goals and objectives to be achieved. Goals and objectives should be specific for each year of the work plan presented. Recipients will be required to periodic progress reports (timing determined by the funding agency) in which progress against these goals and objectives will be reported.
- b. Background. Provide sufficient background information for reviewers to independently assess the significance of the proposed project in terms of demonstrating the establishment of a Marine BON. Summarize the importance of the proposed demonstration Marine BON and the relationship of the proposed work to other regional efforts.
- c. Audience. Identify specific users of the results of the project, describe how they will use the results, and identify any training that will be needed for users to make full use of the results.

- d. Approach. Provide a work plan that: identifies specific tasks to be accomplished; explains the technical approach (including quality assurance) needed to accomplish the tasks; identifies partner roles and contributions, including resources; and identifies potential obstacles to successful completion of the goals and objectives. Describe how users are involved in the planning and design process. The work plan must clearly address data management requirements, and the steps to be taken to achieve efficient and effective data access and archiving that is compliant with federal regulations, including the Data Sharing Plan Policy under 'Other Information' below. If the project includes federal partners, the roles, responsibilities and contributions of the federal partners must be clearly identified.
- e. Benefits. Identify, with a high degree of specificity, the users of the information derived from the work, and the benefits that will be achieved for those users, as well as society as a whole. Document how valid user requirements are guiding the proposed work. Describe how the information from the project will be delivered to those users, and any special considerations or requirements for ensuring or improving the delivery of information.
- f. Milestone Schedule. Display time lines for major tasks, target milestones for important intermediate and final products including deliverables, and key project outcomes.
- g. Cost Proposal. NOPP requires that the cost proposal lead with a table summarizing, by fiscal year and for each entity requesting funds: the Principal Investigator(s), the name of the institution and its nature, and funds requested for each fiscal year of the proposed effort. Applicants must also provide a budget description that follows the categories and formats in the NOAA grants package (Standard Form 424-A) and a brief narrative justification of the budget (budget narrative). A Standard Form 424-A must be submitted for each year of the project as well as for each subcontract.

The budget narrative should include information on travel such as costs, destinations, number of travelers, and a justification of relevance to the project. If trip details are unknown, applicants must state the basis for any proposed travel charges. Foreign travel must receive prior approval and should be included in the proposal to avoid having to request approval after the project starts. Partner agencies will manage travel funding in accordance with their own policies and procedures.

If NOAA is requested to perform any work as part of the project, this work must be reflected in the project description and budget narrative. The budget should clearly show where all funds will go and how the funds will be used. Applications for federal assistance (forms 424 and 424a) must show the total amount LESS what goes to a NOAA partner; the budget narrative should indicate the total amount including that which goes to a NOAA partner and should include text stating that the applicant wishes for NOAA to retain those funds and have them used by the partner NOAA office. Additional detailed budget information should be included in an appendix (see below for additional information).

4. Appendices

- a. Additional Detailed Budget Information.
- i. Provide an SF-424A for each year of the proposal (SF-424As will not be included in the page count of the proposal or appendices).
- ii. Provide a separate budget for each subaward and subcontract. Include names and locations (city, state, Congressional district) of all entities receiving funds and primary places of performance under the subcontract/subaward.
- iii. Itemize and describe the intended use of equipment purchased under this award. For purchases of \$5,000 or greater, applicants should include a brief narrative in the proposal and detailed budget information in the appendix and complete a lease versus purchase analysis for the equipment. Identify who will retain ownership of any equipment purchased through grant funds after the project ends.
- b. Resumes. Provide resumes of the Principal Investigator and other key personnel critical to the success of the project. Ensure that resumes address qualifications relevant to conducting the proposed work. Limit resumes to a maximum of two pages for each key investigator.
 - c. National Environmental Policy Act (NEPA)

NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), for applicant projects or proposals which are seeking NOAA federal funding opportunities.

Detailed information on NOAA compliance with NEPA can be found at the following NOAA NEPA website: http://www.nepa.noaa.gov, including our NOAA Administrative Order 216-6 for NEPA, http://www.gc.noaa.gov/documents/NAO216_6_TOC.pdf, and the

Council on Environmental Quality implementation regulations, http://ceq.hss.doe.gov/Nepa/regs/ceq/toc_ceq.htm .

As part of an applicant's package, under the description of program activities, applicants are required to provide detailed information on the activities to be conducted, locations, sites, species and habitat to be affected, possible construction activities, and any environmental concerns (e.g., use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems).

NOAA may require follow-up information after the application process has been completed. In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting of an environmental assessment, if NOAA determines an assessment is required. Applicants will also be required to cooperate with NOAA in identifying and implementing feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. Failure to do so shall be grounds for the denial of not selecting an application. In some cases if additional information is required after an application is selected, funds can be withheld by the Grants Officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment on any impacts that a project may have on the environment.

Applicants are required to answer the questions indicated in this Announcement of Federal

Funding Opportunity. Applicants should answer the NEPA questions to the best of their ability with as much detail as possible. If the applicant does not answer all of the questions indicated in the Announcement of Federal Funding Opportunity the application may be considered incomplete.

Some of the questions may overlap with material provided in other parts of the application. This overlap occurs because the answers to the questionnaire are provided to NOAA staff who do not review the other parts of the application. If appropriate, the applicant may copy the information from other parts of the application and paste it into the answers to the questionnaire. Many questions have a yes or no response. If the response is

"no" the applicant does not need to elaborate on their answer. If the response is yes the question will have a second part asking the applicant to provide more information.

Applicant NEPA questions are as follows:

Question C1. Is the proposed activity going to be conducted in partnership with NOAA or would the proposed activity require NOAA's direct involvement, activity, or oversight? If yes, describe NOAA's involvement, activity, or oversight, including the name of the office or program that is involved.

Question C2. Would the proposed activity involve any other federal agency(ies) partnership, direct involvement, activity, or oversight? If yes, provide the name(s) of the agency(ies) and describe its involvement, activity, or oversight.

Question D1. Provide a brief description of the location of the proposed activity.

Question E1. List any federal, state, or local permits, authorizations, or waivers that would be required to complete the proposed activity. Provide the date the permit, authorization, or waiver was obtained or will be obtained. Provide copies of the permit, authorization, or waiver as appropriate. Was a NEPA analysis prepared for the permit, authorization, or waiver? If yes, state the title of the NEPA analysis and provide copies of the NEPA analysis.

Question F1. Is there the potential for the proposed activity to cause changes that would be different from normal ambient conditions (e.g., temperature, light, turbidity, noise, other human activity levels, etc.)? If yes, describe the changes and the circumstances that would cause these changes.

Paperwork Reduction Act Statement Public reporting burden for this collection of NEPA information is estimated to average 3 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other suggestions for reducing this burden to Mr. Steve Kokkinakis, SSMC3, Room 15723, 1315 East West Highway, Silver Spring, MD 20910. The information collection does not request any proprietary or confidential information. No confidentiality is provided.

Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subjected to a penalty for failure to comply with, a collection of

information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number. The valid OMB Control Number is 0648-0538, which expires on August 31, 2014.

C. Submission Dates and Times

Applications must be received by 5:00 pm, Eastern Time on Monday, December 2, 2013. For applications submitted through grants.gov a date and time receipt indication is included and will be the basis of determining timeliness. Hard copy submissions will be date and time stamped when they are received in the IOOS Program Office.

D. Intergovernmental Review

Funding applications that include State agencies as funded partners are subject to Executive Order 12372, "Intergovernmental Review of Federal Programs", which relies on State and local processes for the coordination and review of proposed Federal financial assistance and direct Federal development. It is the state agency's responsibility to contact their state's Single Point of Contact (SPCO) to find out about and comply with the state's process under EO 12372. To assist the applicant, the names and addresses of the SPOCs are listed on the Office of Management and Budget Web site: http://www.whitehouse.gov/omb/grants/spoc.html.

E. Funding Restrictions

None.

F. Other Submission Requirements

Applicants using Grants.gov must locate the downloadable application package for this solicitation by the Funding Opportunity Number or the CFDA number (11.012). Applicants will be able to download a copy of the application package, complete it off line, and then upload and submit the application via the Grants.gov site. Grants.gov will provide information about submitting a proposal through the site as well as the hours of operation.

An organization's one time registration process to use Grants.gov may take up to three weeks to complete so please allow sufficient time to ensure applications are submitted before the closing date. The Grants.gov site contains directions for submitting an application, the application package (forms), and is also where the completed application is submitted.

After electronic submission of the application, the person submitting the application will receive within the next 24 to 48 hours two e-mail messages from Grants.gov updating them on the progress of their application. The first e-mail will confirm receipt of the application by the Grants.gov system, and the second will indicate that the application has either been

successfully validated by the system prior to transmission to the granting agency or has been rejected due to errors. After the application has been validated, this same person will receive another e-mail when the application has been downloaded by the federal agency.

To use Grants.gov, applicants must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number and be registered in the Central Contractor Registry (CCR). Allow a minimum of five days to complete the CCR registration. (Note: Your organization's Employer Identification Number (EIN) will be needed on the application form.)

All proposal package materials must be submitted through Grants.gov or through surface mail by the submission deadline, including any letters of support.

V. Application Review Information

A. Evaluation Criteria

1. Importance/Relevance and Applicability of Application to the Program Goals (35%)

This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, or local activities. This includes importance and relevance to the program priorities listed above for the Marine BON competition. The PI's record of making his/her data accessible and useable by the scientific community in the past will be considered when evaluating the importance and relevance of the application.

2. Technical/Scientific Merit (35%)

This criterion assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether the goals of the Competition will be realized through clear project goals and objectives. This criterion also assesses whether the proposed work has potential value for decision makers and resource managers.

3. Overall Qualifications of Applicants (10%)

This criterion assesses whether the applicant team possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project.

4. Project Costs (10%)

This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time frame.

5. Outreach and Education (10%)

This criterion assesses whether the project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources.

B. Review and Selection Process

An initial administrative screening is conducted to determine compliance with requirements and completeness. The merit review process will then be conducted by the National Oceanographic Partnership Program (NOPP) office with input from the funding agencies and other interested NOPP agencies. All proposals will be evaluated and individually scored in accordance with the assigned weights of the above evaluation criteria by at least three independent peer evaluations. The merit review ratings are used to produce a rank order of the proposals. The Selecting Official(s) will consider the rank order of proposals against the selection factors listed below. The Selecting Official shall award in the rank order unless the proposal is justified to be selected out of rank order based upon one or more of the selection factors. The Selecting Official or designee may negotiate the funding level of the proposal.

\sim	a 1	. •	T .
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	action	Factors
C .	יוטכוי	ccuon	1 actors

- 1. Availability of funding
- 2. Balance/distribution of funds:
- a. Geographically
- b. By type of partners
- c. By project types
- d. By research areas
- e. By type of institutions
- 3. Duplication of other projects funded or considered for funding by NOAA/federal agencies
 - 4. Program priorities and policy factors
 - 5. Applicant's prior award performance
 - 6. Partnerships with and participation of targeted groups
- 7. Adequacy of information necessary for NOAA staff to make a NEPA determination and draft necessary documentation before recommendations for funding are made.
- D. Anticipated Announcement and Award Dates

The start date on proposals should be June 1, 2014; or the first day of the month of any month after June 2014, but no later than August 2014.

VI. Award Administration Information

A. Award Notices

Applications recommended for funding by the selecting official(s) will be forwarded to the appropriate agency grants management or procurement offices. The applicant will be notified by the NOPP office by e-mail that their application was recommended for funding. The applicant must be aware that the notification by the NOPP office is NOT the official award notice. Official notification happens only when the applicant receives an award notice from a federal grants or procurement officer (NOAA funding awardees will be notified by a grants officer), either by postal mail or electronically.

Costs incurred prior to receiving notice from an authorized federal grants or procurement officer are solely at one's own risk of these costs not being included under the award. Unsuccessful applications will be destroyed and not returned to the applicant.

B. Administrative and National Policy Requirements

- 1. Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements Administrative and national policy requirements for all Department of Commerce awards are contained in the Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the Federal Register notice of December 17, 2012 (77 FR 74634). A copy of the notice may be obtained at http://www.gpoaccess.gov/fr/search.html.
- 2. Limitation of Liability: In no event will NOPP or the partner agencies be responsible for proposal preparation costs if these programs are cancelled because of other agency priorities. Publication of this announcement does not oblige NOAA or NOPP to award any specific project or to provide special privileges.
- 3. For applicants receiving funds from NOAA: To enable the use of a universal identifier and to enhance the quality of information available to the public as required by the Federal Funding Accountability and Transparency Act of 2006, to the extent applicable, any applicant awarded in response to this announcement will be required to use the System for Award Management (SAM). The link is: https://www.sam.gov/portal/public/SAM/.
- 4. For applicants receiving funds from NOAA: Applicants are also required to use the Dun and Bradstreet Universal Numbering System and will be subject to reporting

requirements, as identified in OMB guidance published at 2 CFR Part 25. The link is: http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title02/2cfr25_main_02.tpl.

5. Unpaid Tax Liability – In accordance with current Federal appropriations law, NOAA will provide a successful corporate applicant a form to be completed by its authorized representatives certifying that the corporation has no Federally-assessed unpaid or delinquent tax liability or recent felony criminal convictions under any Federal law.

C. Reporting

Award recipients are subject to NOPP and partner agency requirements for periodic reporting.

NOAA awardees will be required to submit financial and performance (technical) progress reports electronically through the NOAA Grants On-Line System. Instructions for submitting financial and progress reports will be provided by NOAA Grants Management Division.

VII. Agency Contacts

For administrative questions regarding this announcement, contact: Regina Evans, U.S. IOOS, 1100 Wayne Avenue, Suite 1225, Silver Spring, Maryland 20910; Phone: 301-427-2422; E-mail: Regina.Evans@noaa.gov

For technical questions regarding program priorities or proposal content, contact: Gabrielle Canonico, U.S. IOOS, 1100 Wayne Avenue, Suite 1225, Silver Spring, Maryland 20910; Phone: 301-427-2428; E-mail: Gabrielle.Canonico@noaa.gov

VIII. Other Information

A. Applicant information

Applicants' names will be released to the NOPP office, which will be managing the merit review process; NOPP staff have all signed non-disclosure agreements to protect this information. NOAA will not release the names of applicants submitting proposals for any other purpose unless ordered by a court or requested to do so by an appropriate NOAA official and administrative protocol.

Applicants can use the public search feature at: https://grantsonline.rdc.noaa.gov/flows/home/Login/LoginController.jpf to find information about NOAA awards or go through the Freedom of Information Act process to request information about grant competitions. More information about the NOAA FOI process is on-line at http://www.rdc.noaa.gov/~foia/.

B. Data Sharing Policy for Recipients of NOAA funds

NOAA Data Sharing Policy for Environmental Data:

Environmental data and information, collected and/or created under NOAA grants/cooperative agreements must be made visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner (typically no later than two (2) years after the data are collected or created), except where limited by law, regulation, policy or by security requirements.

- 1. Unless otherwise noted in this federal funding announcement, a Data/Information Sharing Plan of no more than two pages shall be required as part of the Project Narrative. A typical plan may include the types of environmental data and information to be created during the course of the project; the tentative date by which data will be shared; the standards to be used for data/metadata format and content; policies addressing data stewardship and preservation; procedures for providing access, data, and security; and prior experience in publishing such data. The Data/Information Sharing Plan will be reviewed as part of the NOAA Standard Evaluation Criteria, Item 1 -- Importance and/or Relevance and Applicability of Proposed Project to the Mission Goals.
- 2. The Data/Information Sharing Plan (and any subsequent revisions or updates) will be made publicly available at time of award and, thereafter, will be posted with the published data.

3. Failing to share environmental data and information in accordance with the submitted Data/Information Sharing Plan may lead to disallowed costs and be considered by NOAA when making future award decisions.

C. References

Duffy, J.E., L.A. Amaral-Zettler, D.G. Fautin, G. Paulay, T.A. Rynearson, H.M. Sosik, and J.J. Stachowicz. 2013. Envisioning a marine biodiversity observation network. BioScience 63: 351-361.

Final Recommendations of the Interagency Ocean Policy Task Force, July 19, 2010, http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf

NOPP 2010. Attaining an Operational Marine Biodiversity Observation Network (BON) Synthesis Report. Steering Committee: Linda Amaral-Zettler, J. Emmett Duffy, Daphne Fautin, Gustav Paulay, Tatiana Rynearson, http://www.nopp.org/wpcontent/uploads/2010/03/BON_SynthesisReport.pdf

Palumbi, S. R., P. A. Sandifer, J. D. Allan, M. W. Beck, D. G. Fautin, M. J. Fogarty, B. S. Halpern, L. S. Incze, J. A. Leong, E. Norse, J. J. Stachowicz, and D. H. Wall. 2009. Managing for ocean biodiversity to sustain marine ecosystem services. Frontiers in Ecology and the Environment 7:204-211.

Ocean.US 2006. The First Integrated Ocean Observing System Development Plan:A Report of the National Ocean Research Leadership Council and the Interagency Committee on Ocean Science and Resource Management Integration. Ocean.US, Arlington, VA. 86 pp. http://www.ocean.us/documents/docs/FINAL-ImpPlan-NORLC.pdf

Worm, B., E. B. Barbier, N. Beaumont, J. E. Duffy, C. Folke, B. S. Halpern, J. B. C. Jackson, H. K. Lotze, F. Micheli, S. R. Palumbi, E. Sala, K. A. Selkoe, J. J. Stachowicz, and R. Watson. 2006. Impacts of biodiversity loss on ocean ecosystem services. Science 314:787-790.